Name: _____

Roll No: _____

Class: _____ Section: _____ Date: _____

Chapter-1

## GOOGLE APPS

**A. Answer the following questions:**

1. What are Google slides? Write any 2 features of Google slides.

   ................................................................................................................................

   ................................................................................................................................

2. Write the steps to create a YouTube account.

   ................................................................................................................................

   ................................................................................................................................

**B. Number the steps to share a Google sheet.**

☐ Enter the email address(es) of the people with whom you want to share the spreadsheet in the box. Or you can copy the link if you do not know the email address.

☐ Click on the Send button to share the file.

☐ Assign permission levels by clicking on the Settings button.

☐ Click on the Share button from the top-right corner of the spreadsheet. The Share with people and groups pop-up box appears.

☐ Type a message for the receiver in the Message box.

☐ Click on the status of the receiver. You can choose from Editor, Viewer or Commenter.

**C. Fill in the blanks.**

1. Share icon is used to generate a link of the document to ............................. and ............................. access.

2. Hybrid and Satellite are the two kinds of ............................. views.

3. When working ............................., changes made to the Google docs are saved ............................. .

Grade: ☆ ☆ ☆ ☆ ☆          Teacher's Signature: _____

**ORANGE**

**WORKSHEET**

**DIGICODE AI**
Ver. 2.1

**Chapter-2**

**CLASS 8**

Name: _____

Roll No: _____

Class: _____ Section: _____ Date: _____

## ANIMATION IN KRITA

**A. Tick (✓) the correct option.**

1. Which of the following is used to switch to the Animation mode?

    a. Choose workspace ☐            b. Workspace ☐

    c. Settings ☐            d. Timeline ☐

2. Which of the following is used to control and manage the animation of different objects and layers?

    a. Timeline ☐            b. Layer ☐

    c. Oval ☐            d. None of these ☐

3. Which of the following are special frames where some change is defined in the properties of an object?

    a. Blank Frames ☐            b. Keyframes ☐

    c. Layers ☐            d. All of these ☐

**B. Match the following:**

1. Stage            a. Special frames where some change is defined

2. Timeline            b. Animation's Workspace

3. Keyframe            c. A rectangle section which is used to control and manage the animation

**C. Create animated traffic lights using Krita and write the steps in the space given below:**

Grade: ☆ ☆ ☆ ☆ ☆            Teacher's Signature: _____

ORANGE

DIGICODE AI
Ver. 2.1

Name: _____

Roll No: _____
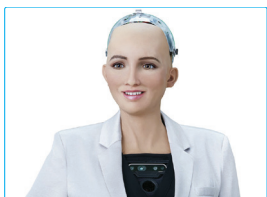
Class: _____ Section: _____ Date: _____

Chapter-3

CLASS 8

# TRENDING TECHNOLOGIES

**A.** **Write the full form of the following abbreviations. Also, write a line about these technologies.**

1. AR: ...........................................................................................................

2. VR: ...........................................................................................................

3. RPA: .........................................................................................................

4. IoT: ...........................................................................................................

**B.** **Identify the robot and write its feature.**

1. 
...........................................................
...........................................................
...........................................................

2. 
...........................................................
...........................................................
...........................................................

3. 
...........................................................
...........................................................
...........................................................

**C.** **Answer the following questions:**

1. What kind of apps are Siri and Alexa?

.......................................................................................................................

2. What has eye-covering headset and headphones to completely replace the real world with the virtual one?

.......................................................................................................................

Grade: ☆ ☆ ☆ ☆ ☆ Teacher's Signature: _____

ORANGE

WORKSHEET

DIGICODE AI
Ver. 2.1

Chapter-4

CLASS 8

Name: _____

Roll No: _____

Class: _____ Section: _____ Date: _____

# ALGORITHMIC INTELLIGENCE

**A.** **Write the result for the following conditions if num1 is 600 and num2 is 800:**

| **If** (num1 > 500) **OR** (num2 > 500) **Then** Write "GREATER" **Else** Write "SMALLER" | **If** (num1 > 500) **AND** (num2 > 500) **Then** Write "GREATER" **Else** Write "SMALLER" | **If** (num1 < 500) **Then** Write "GREATER" **Else** Write "SMALLER" |

[   ]                    [   ]                    [   ]

**B.** **Answer the following questions:**

1.  Write the difference between the following with an example of each:

    a. AND condition and OR condition

    ....................................................................................................................

    b. counting loop and a conditional loop

    ....................................................................................................................

2.  Write a program to check whether a given number is negative or positive. If the number is positive, then print "Positive number". If the number is negative, then print "Negative number".

    ....................................................................................................................

    ....................................................................................................................

**C.** **Competency-based/Application-based question.**

Lokesh has created a program in which he has written blocks of code multiple times to cover the path ten times if a given condition is right. What can he used to reduce the lines of code in his program?

....................................................................................................................

**Grade:** ☆ ☆ ☆ ☆ ☆          **Teacher's Signature:** _____

# WORKSHEET

Name: _____

Roll No: _____

Class: _____ Section: _____ Date: _____

## ADVANCED MAKECODE ARCADE

**A. Define the following terms:**

1. Sequential: ....................................................................................................

....................................................................................................

2. Selection/ Conditional: .........................................................................

....................................................................................................

3. Iteration: ...........................................................................................

....................................................................................................

**B. Write the output of the following program:**

```
on start
  for num from 0 to 9
  do
    if  num  =  3  then
      continue
    set text to join text num
  splash text
```

**C. Write 'T' for true and 'F' for false.**

1. Functions are reusable blocks of code that perform specific tasks. ..............

2. The actual value passed to a function when it's called. ..............

3. The forever loop executes a block of code a specified number of times. ..............

4. The while loop runs if a specified condition is true. ..............

5. The for loop is a counting loop. ..............

Grade: ☆ ☆ ☆ ☆ ☆          Teacher's Signature: _____

# ORANGE

WORSHEET

DIGICODE AI
Ver. 2.1

Chapter-6

CLASS 8

Name: _____

Roll No: _____

Class: _____ Section: _____ Date: _____

# LOOPING STATEMENTS IN PYTHON

**A.  Define the following:**

1.  break statement - ...........................................................................................................
    .......................................................................................................................

2.  while statement - ..........................................................................................................
    .......................................................................................................................

3.  for loop - ...................................................................................................................
    .......................................................................................................................

**B.  Fill in the blanks.**

1.  The .................. statement is used to repeat a set of instructions until a condition evaluates to true.

2.  The print() function to .................. output on the screen.

3.  The .................. block is executed when the condition given in the while statement becomes false.

4.  The .................. function is an in-built function that generates a list which is a sequence type.

5.  The .................. statement is used to repeat an instruction or a set of instructions a fixed number of times.

**C.  Write a Python program to print all the ['a', 'e', 'i', 'o', 'u'] in a user input string.**

.......................................................................................................................

.......................................................................................................................

.......................................................................................................................

.......................................................................................................................

Grade: ☆ ☆ ☆ ☆ ☆          Teacher's Signature: _____

# WORKSHEET

Name: _____

Roll No: _____

Class: _____ Section: _____ Date: _____

**DIGICODE AI**
Ver. 2.1

Chapter-7

## FUNCTIONS IN PYTHON

**A. Define the following.**

1. User-Defined Functions - ..............................................................................................

...........................................................................................................................................

2. Built- In functions - .......................................................................................................

...........................................................................................................................................

3. Calling function - ............................................................................................................

...........................................................................................................................................

**B. Fill in the blanks.**

1. A ........................ is divided into small modules and each module, performs a specific task.

2. A function may or may not ........................ a value.

3. In Python, a function can call the same function again and again, called as ..........................

4. The statements are the ........................ instructions that the function can perform.

5. The ........................ functions take parameters but do not return anything.

**C. Write a program to print the sum of first 10 natural numbers using functions.**

...........................................................................................................................................

...........................................................................................................................................

...........................................................................................................................................

...........................................................................................................................................

...........................................................................................................................................

...........................................................................................................................................

Grade: ☆ ☆ ☆ ☆ ☆          Teacher's Signature: _____

ORANGE

Name: _____

Roll No: _____

Class: _____ Section: _____ Date: _____

## PARTS OF ROBOTS

**A. Tick (✓) the correct option.**

1. Which of the following is just like a human arm?

   a. Wrist ☐     b. Manipulator ☐

   c. Elbow ☐     d. None of these ☐

2. Which of the following locomotive devices are noiseless and easy to program?

   a. Electric ☐     b. Hydraulic ☐

   c. Pneumatic ☐     d. All of these ☐

3. Which of the following is/are categories of end effectors?

   a. Manipulator ☐     b. Fingers ☐

   c. Grippers ☐     d. None of these ☐

4. Which of the following locomotive devices are used in heavy machinery?

   a. Electric ☐     b. Hydraulic ☐

   c. Pneumatic ☐     d. Manipulator ☐

**B. Write 'T' for true and 'F' for false.**

1. Robots are mechanical devices. ....................

2. Emotions and feelings are the domains of robots. ....................

3. There are mainly two categories of end effectors. ....................

4. Cameras allow a robot to construct a visual picture of its background. ....................

5. Microphones in some robots are used to sense temperature. ....................

Grade: ☆ ☆ ☆ ☆ ☆     Teacher's Signature: _____

**ORANGE**

Name: _____

Roll No: _____

Class: _____ Section: _____ Date: _____

DIGICODE AI
Ver. 2.1

Chapter-9

CLASS 8

## AI DOMAINS

**A.** **Answer the following in one or two words:**

1. Which domain of AI checks the sender of the email and categorises the mails as spam or junk?

   ........................

2. Name any 2 domains of AI.

   ........................

3. AI's ability to work so well with data analytics is because of which domain of AI?

   ........................

4. What is used in production lines to detect small cracks or defects in parts that are normally undetectable by the human eye?

   ........................

**B.** **Write 'T' for true and 'F' for false.**

1. Everyday human intelligence processes a lot of phenomena that affects the quality of decisions taken by humans.

   ............

2. Humans spend a large amount of time and effort to analyse and filter data, but AI systems can manage and organise huge volumes of data in much less time.

   ............

3. Humans have the tendency to get bored while performing repetitive tasks, which can improve their productivity.

   ............

4. From recognizing to processing the live action of a football game, NLP challenges and surpasses human visual abilities in many areas.

   ............

**C.** **Answer the following questions:**

1. Mention any three advantages of AI in detail.

   ........................................................................

2. Explain the applications of Big Data.

   ........................................................................

3. How is Computer Vision helpful to us?

   ........................................................................

4. What are the real-life applications of NLP?

   ........................................................................

**Grade:** ☆ ☆ ☆ ☆ ☆     **Teacher's Signature:** _____

# SDGs

**A. Tick (✓) the correct option.**

1. In which year were the SDGs adopted?

   a. 2020 ☐

   b. 2025 ☐

   c. 2015 ☐

   d. 2010 ☐

2. How many SDGs are there in total?

   a. 15 ☐

   b. 17 ☐

   c. 20 ☐

   d. 25 ☐

3. Which SDG aims to reduce inequality?

   a. Goal 1 ☐

   b. Goal 5 ☐

   c. Goal 10 ☐

   d. Goal 16 ☐

**B. Fill in the blanks.**

1. The SDGs aim to achieve progress by ...................... .

2. Goal 10 reduces ...................... within and between countries.

3. Goal 6 focuses on clean ...................... and sanitation.

4. Goal 4 aims to ensure ...................... education for all.

5. Goal 13 deals with combating ...................... change.

**C. Write 'T' for true and 'F' for false.**

1. There are 15 SDGs adopted by the UN. ......................

2. Poverty eradication is addressed in Goal 1. ......................

3. Promoting renewable energy is part of Goal 5. ......................

4. Quality education for all is ensured through Goal 3. ......................

Grade: ☆ ☆ ☆ ☆ ☆          Teacher's Signature: _____

# WORKSHEET

Name: _____

Roll No: _____

Class: _____ Section: _____ Date: _____

## POSSIBILITIES WITH AI

**A. Tick (✓) the correct option.**

1. Which of the following is not related to Computer Vision?

   a. Face recognition ☐      b. Optical character recognition ☐

   c. Both a. and b. ☐         d. None of these ☐

2. Which type of engineers are working in the following image:

   a. Computer Vision Engineer ☐

   b. Data Scientist ☐

   c. Aerospace Engineer ☐

   d. Civil Engineer ☐

**B. State whether the following statements are True or False.**

1. Niramai Health Analytix is working on an innovative AI based method of detecting breast cancer in its early stage. ..............

2. Kuki is a chatbot product which works as an AI personal assistant. ..............

**C. Write any two skills for each of the following engineers:**

1. Robotics Engineer

   ................................................................................................

2. Aerospace Engineer

   ................................................................................................

Grade: ☆ ☆ ☆ ☆ ☆          Teacher's Signature: _____